

Serial No. 09/750,051

## REMARKS

In accordance with the foregoing, the specification is amended. Claims 1-9, 14-15, and 19-22 are amended for form without narrowing the claims within the meaning of *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 56 USPQ2d 1865 (Fed. Cir. 2000).

No new matter is presented in any of the foregoing and, accordingly, approval and entry of the amended specification and claims are respectfully requested.

Claims 1-22 are pending and under consideration.

## ITEMS 10-12: OBJECTION TO SPECIFICATION: FOREIGN PRIORITY

The Examiner objects to the specification and contends that "(c)laiming the benefit of 2 separate Japanese patent application does not appear to satisfy 35 USC 119(a) . . . please specify a single Japanese patent application." (Action at pages 2-3).

Applicants submit that the Examiner's contention is incorrect. As set forth in 37 CFR 1.55 (a) entitled Claim for Foreign Priority:

(a)n applicant in a nonprovisional application may claim the benefit of the filing date of one or more prior foreign applications under the conditions specified in 35 U.S.C. 119(a) through (d) and (f) . . . (Emphasis added).

Withdrawal of the objection to the specification for claiming the benefit of two prior foreign applications is requested

## ITEMS 13-14: OBJECTION TO SPECIFICATION

The Examiner contends that in the paragraph beginning at page 13, line 26 the term –FIG. 3– should read as "FIG. 2," and that the description on page 16, lines 21-23 and FIG. 5 is inconsistent.

The specification is amended herein to amend the paragraph beginning at page 13, line 26 to change each entry –FIG. 3– to "FIG. 2" as suggested by the Examiner, and to amend the paragraph beginning at page 16, line 15 to be consistent with FIG. 5.

Withdrawal of the objection to the specification is requested.

## ITEM 17: REJECTION OF CLAIM 2 UNDER 35 U.S.C. §112, ¶2

The Examiner rejects claim 2 under 35 U.S.C. §112, second paragraph, as indefinite contending:

the term "categorizing the noise" is not adequately defined. Specifically, the possible categories are not defined.

(Action at page 3).

Applicants respectfully submit that claim 2 is definite as written. It is understood by those skilled in the art that "categorizing" does not require that possible categories be predefined as

Serial No. 09/750,051

the Examiner contends. For example, "categorizing" is defined from the Cambridge International Dictionary of English as putting "things into groups with the same features." (See, <http://dictionary.cambridge.org/define.asp?key=11954&dict=CALD>). It is further understood in the art that these features do not have to be predefined.

Applicants submit that claim 2 complies with 35 U.S.C. §112, and request withdrawal of the rejection to claim 2.

**ITEM 18: REJECTION OF CLAIM 5 UNDER 35 U.S.C. §112, ¶2**

The Examiner rejects claim 5 under 35 U.S.C. §112, second paragraph, as indefinite contending "it is not clear precisely what information is outputted." (Action at page 3).

Claim 5 is amended for form herein as suggested by the Examiner to indicate that a method includes "outputting input circuit information that includes a wiring length that is substantially a Manhattan distance that is determined based on positions of part pins forming the target circuit and a wiring topology."

Applicants submit that claim 5 complies with 35 U.S.C. §112 and request withdrawal of the rejection to claim 5.

**ITEMS 25-39: REJECTION OF CLAIMS 1-3, 7-9, AND 20-22 AS ANTICIPATED BY TSUCHIDA (U.S.P. 5,559,997)**

The Examiner rejects independent claim 1 (and claims 2-3, 7-9, and 20-22 dependent thereon) as anticipated by Tsuchida citing Tsuchida's FIG. 1 and abstract.

Independent claim 1 recites a noise countermeasure determination method including "calculating recommended circuit information considered to minimize a noise by use of at least one formula, based on input circuit information amounting to at least one net of a target circuit which is to be subjected to a noise analysis; and comparing the input circuit information and the recommended circuit information, and determining a differing portion of the recommended circuit information differing from the input circuit information, as noise countermeasures."

**Features Not Taught By Tsuchida**

As provided in MPEP §706.02 entitled Rejection on Prior Art, anticipation requires that the reference must teach every aspect of a claimed invention. Tsuchida does not support an anticipatory-type rejection by not describing features recited in independent claim 1 (and claims 2-3, 7-9, and 20-22 dependent thereon).

According to aspects of the present invention "noise countermeasures" are determined by calculating recommended circuit information, and comparing the input circuit information and the recommended circuit information, so as to determine the "noise countermeasures."

Serial No. 09/750,051

Tsuchida does not teach how noise countermeasures are determined. Even assuming *arguendo* that "noise reduction components" as taught by Tsuchida teach "noise countermeasures" according to aspects of the present invention, Tsuchida does not teach how such "noise reduction components" are determined. That is, Tsuchida teaches a method of designing a printed-circuit board based on the "fundamental circuit design" and the "noise reduction components (or noise countermeasures)" that are input. (See, for example, col. 3, starting at line 10).

That is Tsuchida does not calculate recommended circuit information, and does not compare the input circuit information and the recommended circuit information, so as to determine the noise reduction components (noise countermeasures).

#### Conclusion

Since Tsuchida does not describe features in independent claim 1 (and claims 2-3, 7-9, and 20-22 dependent thereon) the rejection should be withdrawn, and claims 1-3, 7-9, and 20-22 allowed.

#### ITEMS 43: REJECTION OF CLAIMS 10-12 AND 16-18 UNDER 35 U.S.C. §102(b) AS ANTICIPATED BY TSUCHIDA

The Examiner rejects independent claim 10 (and claims 11-12 and 16-18) for the same reasons as the rejection of independent claim 1 (and claims 2-3 and 7-9 respectively). (Action at page 7).

Independent claim 10 recites a noise countermeasure determination apparatus including "a recommended circuit information calculating section calculating recommended circuit information considered to minimize a noise by use of at least one formula, based on input circuit information amounting to at least one net of a target circuit which is to be subjected to a noise analysis; and a noise countermeasure determination section comparing the input circuit information and the recommended circuit information, and determining a differing portion of the recommended circuit information differing from the input circuit information, as noise countermeasures." (Emphasis added).

#### Features Not Taught By Tsuchida

Tsuchida does not support an anticipatory-type rejection by not describing features recited in the independent claim 10 (and claims 11-12 and 16-18) dependent thereon). As discussed above, Tsuchida does not calculate recommended circuit information, and does not compare the input circuit information and the recommended circuit information, so as to determine the noise countermeasures.

Serial No. 09/750,051

## Conclusion

Since Tsuchida does not describe features in independent claim 10 (and claims 11-12 and 16-18) the rejection should be withdrawn, and claims 10-12 and 16-18 allowed.

### ITEM 44: REJECTION OF CLAIM 19 UNDER 35 U.S.C. §102(b) AS ANTICIPATED BY TSUCHIDA

The Examiner rejects independent claim 19 for the same reasons as the rejection of claim 1. (Action at page 7).

Independent claim 19 recites a computer-readable storage storing a program for controlling a computer to determine noise countermeasures, by "calculating recommended circuit information considered to minimize a noise by use of at least one formula, based on input circuit information amounting to at least one net of a target circuit which is to be subjected to a noise analysis; and comparing the input circuit information and the recommended circuit information, and to determine a differing portion of the recommended circuit information differing from the input circuit information, as noise countermeasures." (Emphasis added).

#### Features Not Taught By Tsuchida

Tsuchida does not support an anticipatory-type rejection by not describing features recited in the claim 19. As discussed above, Tsuchida does not calculate recommended circuit information, and does not compare the input circuit information and the recommended circuit information, so as to determine the noise countermeasures.

## Conclusion

Since Tsuchida does not describe features in claim 19, the rejection should be withdrawn, and claim 19 allowed.

### ITEM 48: REJECTION OF CLAIMS 1-3 UNDER 35 U.S.C. §103(a)

The Examiner rejects claims 1-3 under 35 U.S.C. §103(a) as unpatentable. (Action at page 8). The Office Action provides no support, whatsoever, for this rejection. Applicants request withdrawal of the rejection to claims 1-3 and allowance of claims 1-3.

### ITEMS 49-52, 61: REJECTION OF CLAIMS 4 AND 13 UNDER 35 U.S.C. §103(a) OVER TSUCHIDA IN VIEW OF DORF (THE ELECTRICAL ENGINEERING HANDBOOK, SECOND EDITION, RICHARD C. DORF, EDITOR CRC PRESS, 1997)

The Examiner rejects claim 4 under 35 U.S.C. §103(a) as unpatentable over Tsuchida in view of Dorf. (Action at page 8). The Examiner rejects claim 13 for the same reason as the rejection of claim 4. (Action at page 10).

The Action concedes that Tsuchida does not teach a method:

. . . compares(ing) a damping resistance which makes a voltage at a time of a ringback equal to the minimum voltage VIH-1 and the minimum value of the damping

Serial No. 09/750,051

resistance, and outputs(ing) a larger one of the damping resistance.

(Action at page 8).

The Examiner contends, however, that it is obvious to modify Tsuchida with Dorf since "Tsuchida implicitly teaches towards the importance of staying above the minimum voltage during the undershoot." (Action at page 8).

As set forth in MPEP 2144.04:

(t)he mere fact that worker in the art could rearrange the parts of the reference . . . is not by itself sufficient to support a finding of obviousness. The prior art must provide a motivation or reason for the worker in the art, without the benefit of appellant's specification, to make the necessary changes in the reference device. *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. Pat. App. & Inter. 1984).

Applicants submit that the Examiner has not supported his contention for modification of Tsuchida by contending that Tsuchida implicitly teaches toward the importance.

#### Conclusion

Since the Examiner's contentions are unsupported, the rejection should be withdrawn and claims 4 and 13 allowed.

#### ITEMS 53-55, 60-61: REJECTION OF CLAIMS 5 AND 14 UNDER 35 U.S.C. §103(a) UNDER 35 U.S.C. §103(A) OVER TSUCHIDA IN VIEW OF GUO (U.S.P. 6,597,808).

The Examiner rejects claim 5 under 35 U.S.C. 103(a) as being unpatentable over Tsuchida in view of Guo. (Action at pages 8-9). The Examiner rejects claim 14 for the same reason as the rejection of claim 5. (Action at page 10).

The Action concedes that Tsuchida does not teach:

. . . outputting the input circuit information which includes as, a wiring length, a Manhattan distance which is determined based on positions of part pins forming the target circuit and a wiring topology.

(Action at page 8).

The Examiner contends the feature is taught by Guo and that is obvious to modify Guo since:

(o)ne of ordinary skill in the art would have started with Tsuchida . . . as disclosing an "allowable range" of voltage for the overshoot, and then looked to Guo for common techniques of characterizing distance between points.

(Action at page 10).

Applicants submit that the Examiner has not supported his contention, as set forth in MPEP 2144.04, for modification of Tsuchida of "allowable range" to a determination by a Manhattan distance.

#### Conclusion

Since the Examiner's contention is unsupported, the rejection should be withdrawn and claims 5 and 14 allowed.

Serial No. 09/750,051

**ITEMS 56-61: REJECTION OF CLAIMS 6 AND 15 UNDER 35 U.S.C. §103(a) OVER TSUCHIDA IN VIEW OF GUO**

The Examiner rejects claim 6 under 35 U.S.C. 103(a) as being unpatentable over Tsuchida in view of Guo. (Action at page 9). The Examiner rejects claim 15 for the same reasons as the rejection of claim 6. (Action at page 10).

Claim 6 recites a noise countermeasure determination method including "determining an optimum wiring topology from results of the noise check carried out in said carrying out a circuit simulation using the simulation model to use in said outputting input circuit information so that the optimum wiring topology is determined as the noise countermeasures in said comparing the input circuit information and the recommended circuit information." (Emphasis added).

Claim 15 recites a noise countermeasure determination apparatus including "an optimum wiring topology being determined from results of the noise check carried out by said simulation and check section for use by said circuit model creating section, so that the optimum wiring topology is determined as the noise countermeasures by said noise countermeasure determination section." (Emphasis added).

***Prima Facie* Obviousness Not Established**

**Determining Optimum Wiring Topology Not Described By Cited Art Alone Or In Combination**

As provided in MPEP §2143.03 "To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. In re Royka, 490 F. 2d 1981, (CCPA 1974)."

Applicants submit that the cited art alone or in combination does not teach or suggest these features recited in claim 6 or in claim 15. The Examiner does not contend that either Tsuchida or Guo, alone or in combination, teaches determining an optimum wiring topology

**Conclusion**

Since features of claims 6 and 15 are not taught by the cited art and *prima facie* obviousness is not established, the rejection should be withdrawn and claims 6 and 15 allowed.

**CONCLUSION**

There being no further outstanding objections or rejections, It is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Serial No. 09/750,051

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: August 4, 2004

By: Paul W. Bobowiec  
Paul W. Bobowiec  
Registration No. 47,431

1201 New York Avenue, NW, Suite 700  
Washington, D.C. 20005  
Telephone: (202) 434-1500  
Facsimile: (202) 434-1501

**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that this correspondence is being transmitted via facsimile to: Commissioner for Patents,  
P.O. Box 1450, Alexandria, VA 22313-1450  
on August 4, 2004  
STAAS & HALSEY  
By: Paul W. Bobowiec  
Date: 8/4/2004